1: Lorimer T-3 (1920–4; 1934–5) 1938 AV7 Burusho AV7

[643] ruled his country in the humanest and wisest of benevolent autocracies, since the treaty of 1892 placed him on the throne of his murdered father 181 and parricide brother—to our humbler neighbours in Aliabad, the 609 village four miles below the capital which we made our headquarters for fifteen months. As soon as the people grasped the purpose of our [212] coming (which was not easy to explain to an illiterate people) they were overjoyed that a ' Sahib ' should trouble to learn their vernacular—a thing which no white man or woman had done before—and take an interest in their customs and hereditary lore. At first they would hesitate : ' but you have wheels (=machines) in England, and can do all these things better than we can '. Within a few days they were vying with each other in explaining, demonstrating and bringing ploughs, looms, winnowing forks, bows, stone cooking pots to the resthouse where we were installed, that D.L. might measure them and take ' studio portraits ' of them, ' for you mustn't put anything in the book about us that isn't exactly true '.

132 The entire life of the Hunzukuts is centred in water. The rain-
312 fall in the oasis level (7–9,000 feet), is negligible—we reckoned less
361 than 2 inches per annum ; in default of any means of raising the water, the river, flowing between its crumbly earthen cliffs, 500 or 1,000 feet below their fields is useless for irrigation ; there are no springs or wells ; hence all water for all purposes must be trapped high up at the snout of some side glacier and conveyed on galleried aqueducts across yawning gorges and the faces of sheer cliffs. The main water channel, the Dala, which supplies all the more recent villages of Hunza, ' the new settlements ' as they are called in contradistinction to the three original villages—Baltit the capital, Altit and Ganesh—travels some 8 or 10 miles in its circuitous route from the Herber glacier in the gorge behind Baltit, cradled between snow-peaks of 23,000 feet, before it peters out in a semicircular sweep round Aliabad.

312 The Dala was dug some three or four generations ago (90–100
● 412 years) with wooden shovels and wooden picks tipped with ibex horn, and represents an amazing feat of engineering skill for people without
816 any instruments of precision. The sluices that control the distribution of water—every teaspoonful of which is rigorously allotted—are of the simplest ; most often a slab of flattish stone plastered in with mud, sometimes a wooden shutter sliding in a rude wooden frame, sometimes when the water is being taken off to a lower level a circular hole in a stone slab, closed at need with a mushroom-shaped stopper, rough hewn from a solid tree trunk.

1: Lorimer T-3 (1920-4; 1934-5) 1938 AV7 Burusho AV7

[17] diagonally superimposed on each other, exactly duplicating some of
354 the ancient smoke-holes recently unearthed in Central Asia by Le
342 Coq. A large store-room about 6 feet deep runs the full width and height of the house and is entered by a door at the back of the central atrium. It is provided with a minute, unglazed, shuttered window, the only 'window' known in Hunza except in the houses of the Mir
352 and the Wazir. The furnishings of the living room are simple but adequate. Two large sleeping benches, some 7 feet wide and 9 feet
513 long, flank the side walls, and are raised 18 inches or so above the floor.
354 The sleepers roll themselves in homespun blankets or padded quilts and sleep crosswise on the bench like parallel sausage rolls. One bench is reserved for men and the other for women. The hearth occupies the centre of the floor and is outlined by four stone kerbs. The sleeping benches, which serve by day as sitting places, are screened at head and foot by capacious cupboards, one of which serves the mistress of the house for her kneading trough and other utensils, another takes the form of a large bin with sub-divisions to hold the current supply of flour.

415 The normal cooking pots and oil vessels, lamp cruses, etc., are of
324 hollowed soap-stone, often of gracefully irregular shape, reflecting that of the boulder from which they have been hewn. Gourds furnish
322 the usual 'jugs', and wooden bowls, nowadays frequently turned on a
177 lathe, the eating vessels. Wooden spoons and ladles are cut in one piece, the handles being formed by a convenient branch or twig. The delightful result is that no two pots, bowls, or spoons, are identical in size or shape. Unfortunately aluminium or enamelled iron vessels and galvanized buckets are finding their way into the country. We ourselves were, I fear, guilty of adding to their number and even introducing a few multi-service kerosene tins.

241 The greater number of field implements are still of wood, though
412 the ploughshares are now usually shod with an iron shoe or tip, and a lucky family may have acquired an iron spade or hoe or a five-pronged
563 iron fork. A small community of ultimately Indian origin, the Béricho,
326 lives amongst the Burusho and supplies the music for their polo and dancing and the blacksmithery of their simple ironwork: the shears, the rude sickle, the sharpened scrap of iron that serves as razor.

[412] The sharpened stone or ibex horn, which till very recently served
335 for all necessary carpentry, is now replaced by the iron-headed adze
342 which hacks out the steps on the log ladder and shapes the narrow planks for doors and cupboards. The true Hunza door consists of a set of

1: Lorimer T-3 (1920-4; 1934-5) 1938 AV7 Burusho AV7

PLATE IV

322
412

A PRIMITIVE LATHE: THE MAN FOR WHOM THE BOWL IS BEING MADE SITS IN A PIT AND SUPPLIES THE POWER WITH TWO TREADLES (*see p. 14*)

P. 8 (11)

dish," and right enough the driver quickly anticipated her cows' needs, and when her dish was full went off and emptied it on a little heap of manure. You thus keep your grain uncontaminated and salvage your manure—most priceless of products. If the driver lapses into a daydream a warning yell from the onlookers would call her attention back in time. I don't know whether the dung-dish is in use elsewhere, but it is at any rate one more symbol of Hunza fastidiousness. You *plough* with oxen, but you thresh with *cows*, whose slighter needs can also be forestalled. When all the wheat is thoroughly trampled the men take great wooden five-pronged forks, most gracefully shaped things (made, of course, at home), and towards evening when there comes a little breeze they toss the broken wheat up into the air to winnow it. The broken straw is blown to one side while the heavier grain falls into a heap. Then they take wooden, home-made spades and toss the grain again to get rid of any remaining straw. These processes take many hours' hard work, and will not be completed in one day; but they have no rain to fear and can leave their stacks of straw and heaps of grain from one day till the next. They leave their threshing-floors unguarded when they go home at night; pilfering a neighbour's food is simply "not done."

When the winnowing is over the women take a big sieve, made of thin strips of leather criss-crossed over a round frame. This is coarse enough to let the grain through but to catch any scraps of straw. When this first sieving is over, they take a finer sieve (with, of course, a totally different name) which keeps the grain and lets the dust fall through. But even then they don't consider the job quite finished. The women turn the pile over with their hands, carefully picking out any sliver of straw that may have previously escaped. When at last it is ready, the grain is filled into large skin sacks, which will take up to 160 lb. or so, and the men carry these off to the storeroom while the broken straw is loaded into huge open-ribbed baskets that can also be carried only by a man. The straw is taken up on to the flat roof and poured down through a central hole into the straw shed.

There is no hard and fast rule about what is woman's work

Chapter 18

SEPTEMBER HARVEST

SUMMER is a breathless time in the Hunza fields. No sooner does the ripening grain show a fine "fox-brown" than a line of five or six men and women attack it in unison. They do not "reap" in our sense of the word. They squat in that inimitably convenient way that the East has preserved for working—no backs bent with stooping, no knees worn out with kneeling—and grasp a full handful of the ripe stalks and pull up roots and all; first right, then left; clap the two together to shake off the all-too-valuable earth; lay the bundle behind them; shuffle on a pace and repeat. The fields are small and in an incredibly short space of time a golden field is prostrate and the ground carpeted with neatly aligned rows of swathes. It is beautiful to see a party at work: father and mother, daughters, sons, and wives; they space themselves and keep their line as exactly as soldiers on parade, yet each works individually, each at his own pace and in his own way—without haste and without pause. They possess rude iron sickles, but when these are used at all they are not used to *cut*, but merely to pull against, if the crop is more than usually deep-rooted.

When the *shandiming* (cut crops) have lain a little and been turned over once or twice they are tied into sheaves and gathered into piles, some as big as a man can carry, others smaller to suit a boy—according to the "man-power" available. A double goat's hair rope is slipped round the waist of the pile and ingeniously knotted so as to leave two shoulder loops. The man or boy flings himself down backwards on to it, slips his arms through the loops and hitches the rope fast. Then some kindly bystander gives a touch to the load from behind,

Chapter 21

HUNZA CRAFTS

ONE of the most refreshing things about Hunza is the absence of machinery. Every essential tool and utensil can be made and mended at home, and every individual enjoys the self-respect that comes from the exercise of necessary craftsmanship. The picturesquely asymmetrical stone cooking-pots, oil-jars, and crusie-lamps have each been fashioned by father or grandfather, or it may be great-grandfather. Each has its own individuality and its own history. The ladles and wooden spoons of delightful and often fantastic shape have been cut out from suitable branched bough or root—handle and bowl in one piece, no two alike. Your own carefully planted and tended willows supply the flexible withies for a dozen kinds of basket, and the man or woman who could not construct the one required would be hard to find. Reels and spindles for spinning, bobbins and shuttles for weaving, wooden hoes and shovels, two-prong forks cut in one piece from the tree or the graceful five-pronged winnowing forks with neat and skilful lashings of gut holding their curved teeth in place, the plough, the frame and heddles of the loom, the treadles and framework of the lathe that turns the wooden bowl, are all home-made. You cure the skins of your own beasts for sacks and bags and boots. When the women want more wool for spinning, any man at any moment will shear another sheep while the women and children hold its legs.

The only work that the home cannot itself tackle is the ironwork—a very recent substitute for stone and bone and horn. An occasional iron pick or shovel, fork or crowbar is brought up "from below" (India or Kashmir) by a returning

son, and is accounted a rare treasure; but for the most part local Béricho make such simple iron goods as are wanted: the slightly convex baking-griddle, the tripod, the simple shears, the sickle blade, the iron tip which shoes the wooden ploughshare, the unpretentious iron razor, the rough tongs, the horseshoe, the spatula for turning bread. The Béricho form the only "caste" in Hunza in anything like the Indian sense.

The story goes that long ago—two hundred years or so, perhaps—some prince of Hunza rendered a service to the ruler of Baltistan, and was duly asked to name his recompense. He coveted neither gold nor horses, but begged for a few families of artisans. These were presented to him and allotted land in Hunza where they settled and multiplied, supplying the Burusho with blacksmiths for such rare iron as they could obtain, and with musicians to enliven their feasts and games of polo. These strangers in the midst are treated with courtesy and kindness, but remain "foreigners" and social inferiors. The Burusho will not intermarry with them. A threat to a troublesome daughter is said to be: "If you don't behave, I'll marry you to a Bérits"; but we never heard the threat employed, still less a case of its being carried out. Each Burusho household pays a small yearly tax to the Béricho community, and in return the blacksmiths tour the villages once or twice a year and make or mend whatever is required. You will see a little crowd gathered in the corner of someone's garden and in the centre the blacksmith crouching beside his simple forge—a few stones ingeniously built up to contain his charcoal fire, with a neat, hollow tube of soapstone below it, into which the bellows play; a stone anvil sunk in the ground; these accessories are provided on the spot and the blacksmith's outfit consists of his hammer and his skill. The bellows is a double one; two goatskin bags are fitted with a nozzle at one end; at the other, two wooden lips that open as you raise your hand and meet tightly in your fist as you press down. They are worked with the right and left hand alternately, and the peasant whose job is in hand is expected to do the blowing.

The Béricho preserve their own customs, and though the menfolk all talk Burushaski, Domáki is the language of their

bim, iˈsɛr giˈmo. Giyasər Šon Guˈkər diˈn iˈsɛ buˈnulo dam nɛ gili mudˈɛlimi.

Hin Dal Kan yakalatər gaˈrtsumo. Elə han buˈnan bim. Iˈsɛr giˈmo. Elər niˈnin dam nɛ giˈli mudɛlimi. Tail oˈčumɛ uˈ talo muyuˈgušants buˈndo buˈnd o.ulo giˈli udɛlimi.

Da uˈmi tiˈts motuman. Dumutsun Hindi kanɛ čaˈr ɛšulo, ɛšulum laˈtɛtər dum u.isuman. Tɛlɛ giˈli modɛlimi. Modˈɛlasər ɛsumo: "Jɛ bɛsan šičam?" Šon Gukuˈrɛ moˈsimi: "Turma aˈlta tsiˈr guyam (*or*, guˈčam). Iˈtsɛ multan miˈnˈɛ. Da hər dɛn goˈr du sɛn. Turma aˈlta tsiˈr ayoˈmanuman kɛ talo kuˈli guˈčan, ama uˈŋatɛ gutɛ bap oˈsam, bɛšal mi hoˈlguˈš amulər niman kɛ miyər manɛ. Ho turma aˈltatsatsum talo xa tsiˈr guˈčan."

Numoˈsun iˈsɛ doˈmulo čumərɛ giˈli dam nɛ giˈli modˈɛlimi. Da iˈnɛ gili modɛlumtsum hər dɛn turma aˈlta ya talo tsiˈr nutsun tobak gaˈtaŋ nuka ha ha ˈɛčumɛ nuˈn iˈsɛ giˈli iwˈərɛ tsiˈr duˈšumɛ

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1 *iˈsɛr giˈmo . . . giˈli mudɛlimi* — Such beings as bilases have the power of hastily entering into boulders and in the normal course could no doubt come out again, but if an iron peg is driven into the boulder and a suitable spell employed they can be kept shut up for at any rate a long period.

Dadi's eventual escape is said to have been predicted by Shon Gukur: *amɛlɛ yasurmər Dadi duˈši*,[1] 'when my jaw-bone has rotted Dadi will come out'. But the jaw-bone is a very durable article. Cp. also the tale of *Qaŋ Jakun*. p. 202 l. 1.

In this and other stories iron evidently retains its magical qualities, which is not surprising as it was comparatively rare and precious in Hunza till quite recently. A couple of generations ago the important Baltit-'Ali.ābād irrigation channel was dug with ibex horns used as picks.

2 *giˈli mudɛlimi* — I don't think this is to be taken as meaning that the peg was visibly driven into her. She was imprisoned by simply driving the peg into the stone.

5 *buˈndo buˈndo.ulo* — the plural is surprising, but the meaning is obvious.

7 *dumu.isuman* — from *d*-isas* || *d*-usas* 'to take out extract'. Here glossed "made her climb" which suggests a point of contact with the intransitive *duˈsas* cp. § 303.

mudɛlimi — from here on the prefix *mo-* replaces the previous *mu-*. As the text was recorded at one sitting there was probably an actual difference in pronunciation by the narrator, not merely a variation in my hearing. So we have **-adɛlas* being substituted for **-dɛlas*. Cp. §§ 242—243.

8 *guyam* — "I have given you" the anticipatory Pret.

[1] [Errata: for duˈši read duˈšo. Cf p. 419, cat. 116 — Analyst.]

pasture grounds for flocks and their herdsmen. — *huyːʊ nuyːn hərəŋːər divmi* taking his flocks with him he returned to the camping ground. 182.12. Cp. *Hərəːʂuŋ* = *Hərəŋ* + *ʂuŋ*, v. Index of Proper Names.

(Cp. Sh. *hərəri*, which will be found in the maps marking the site of camps in the summer pasture-grounds).

2. *hərəŋ, hərʌŋ*, pl. *hˈərʌkindəro*, a free and independent tribe owing allegiance to no one. (There are none such nowadays). — *duwʌlʌšo jəːnawərikˑ umʌnimiːɛ, ɛtsɛ urik Gʌrɛltum Hərʌŋ* (or, *Hərəŋ*) *bila* they turned into flying animals, their name is the Gʌrɛlt Tribe. 206.12,14. *Hunzolo Sʌfər Hərəŋ sɛnʌšo hikum rəːm kɛ qʌdiːm zʌmaːnulo abaːd bʌm* a tribal community called Sʌfər Hərəŋ were established in Hunza in ancient times. *mʌšhuːr qaum urikićiŋ: Dirʌm Hərəŋ, Sʌfər Hərəŋ, Bərəːtʌlɛ Hərəŋ* . . . famous tribe names: the D. H., etc.

(From their meanings it is doubtful whether 1. *hərəŋ* and 2. *hərəŋ* are the same word. Cp. however *giraːm*, village and tribe, community).

hərʌmzaːda -muts bastard, of illegitimate birth; ill-begotten. A general term of abuse. 80.10, 112.25, 128.10, 174,23. (Ar.) Prs.

hərʌnč, pl. *hərəːŋ*, y pitchfork (five-pronged wooden fork for separating straw and grain). (Cp. Sh. *hʌroːč*).

həræŋ, hərʌŋ.

1. Among, between, in the midst of, in the course of, in the middle. Cp. § 82. — *sis uːɛ həræŋ seːibaːn* people are saying among themselves. *u uːi hərʌŋ uːkər ɛːšəŋʌnumʌn* they among themselves killed

7:Tobe C, T-3 (1959)1960 AV7 Burusho AV7
Hunza

and up and down the dangerous rivers. Yes, even the yak bones and horns are never wasted. Picks are fashioned from them. They even find their way into the walls of the homes of the people of Hunza, for they are lighter than stones.

Still I haven't yet mentioned what is generally accepted as the yak's most important contribution to the lives of the people in the highest mountain ranges in the world . . . and that is from the little green herbage they get, they give a good quantity of rich milk, from which is made the famous yak butter. Then last and perhaps even most important, it is butchered for its good quality, health-sustaining meat.

Even the yak tails are useful . . . as brooms or dusters . . . and many are shipped to the Western world and used as Santa Claus beards. And they do make the best Santa Claus beards of all. I know—I have a couple!

Now after you have had a chance to read these qualifications, perhaps you, too, will share my admiration and appreciation of the world's most useful animal.

I was up bright and early the morning I was to go to meet the yaks. Yes, it was just 6 o'clock when I was walking down the enclosed staircase towards the Mir's palace—leaving Cecil asleep, as he still had to remain in bed as the doctor had advised.

I met Jahangir coming from the other guest house and he joined me. We had agreed the previous night to be up at 6 but I never expected that it would work out right on the beam, as it happened in this instance.

So down we went along the stone staircases from one garden level to another until we reached the Mir's palace and then we began to climb up the long wooden staircase again.

As usual, the Mir was there to welcome us, along

7:Tobe C,T-3 (1959)1960 AV7 Burusho AV7
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Water rights are regulated by law and a man can use the water from the conduit that passes his land at certain definitely established periods. The flow or shut-off is controlled by placing a large stone or rock at the opening of the channel into the individual's waterway. It may sound a bit baffling to the average individual, but upon viewing it and examining it, it is easy to understand and, what's more important, it is simple and practical. 312 [423]

Nowhere did I see these waterways covered or encased in pipes—although they did in many places run under the roadway.

As their water supply is glacier-fed, there is never any danger of a supply failing . . . at least, not in the imminent future. However, in cloudy periods the flow slackens and an extended cloudy period causes a severe water shortage.

Lest you get the idea that these conduits or waterways are a simple matter, I want to assure you that they are a marvel of engineering. Further, when you consider that the first one was built about 1860 without any man made tools or iron or steel, you can then believe what a difficult and gigantic undertaking it was. It is a monument to their industry, intelligence and foresight. At least now, they have iron picks with which to dig, rather than having to use ibex horns. [412]

Here I want to mention very definitely that the same type of waterway exists on the other side of the river . . . that is, in Nagir territory.

They do not, in any sense of the word, have orchards as we know orchards in the West, because they don't have a piece of land large enough or flat enough to compare with what we know as an orchard. In the West orchard sites are usually selected with the premeditated view of providing excellent drainage. There- 245 311

I had never seen oil made or rendered from any fruit, food or grain and I asked if I could be allowed to witness this process from the beginning. Arrangements were made and I went to visit a plain ordinary Hunzan house where the mistress was prepared and willing to demonstrate the making of apricot oil. 252

The lady and some of her children sat on the floor with a neat stack of apricot stones beside them. Then she and one of her youngsters took each individual stone and split it open with a rock. The meats were taken out and piled into a stone mortar. Then, when they had filled the mortar, the lady got her pestle and began to pound the kernels until they were made into a meal. [412] Next, she rubbed it with her hands until it was worked into a paste. This she placed into an iron skillet, which was placed over a three-sided stone stove. Then she broke up some small chips of wood that she had ready, ignited them and moved the pan about over the heat until it began to warm up. She kept rubbing and kneading the meal with her hands in the skillet until it got quite warm—but not hot, for she used her hands for turning it in the pan.

Then, she lifted up the mass and put it into a round, solid, earthenware or stone receptacle about 12 inches in diameter, with the sides about two or two and a half inches high. She kneaded this with her fingers and knuckles firmly, much more firmly than one would in kneading dough for bread. [415]

Then, a tablespoonful of water was poured over the meal and the massaging process was continued. It was explained to me that sometimes tea is used instead of water. If the pits are bitter pits from the wild fruit, plain water is used, but for sweet pits from the propagated apricots salt water is used.

The bitter pits are gathered from the trees that grow [222] [373]

262 A farmer who owned and worked 10 acres of work-
556 able land might be able to afford to slaughter a sheep,
231 a goat or a bullock once a year. Yet this luxury could not be dreamed of by the farmer with but one acre.

273 Also, while winter lasts, a glass of wine made from
245 Hunzan grapes is enjoyed occasionally . . . but chiefly by the male head of the household.

415 Knives, forks and spoons as are used in the West are
[412] not seen in the average Hunzan home and even earthenware plates are rare. But cups and earthenware bowls are to be found in most homes. Wooden bowls fashioned out of walnut by the wood-turner of the village are also used in many homes.

352 The rooms are quite bare in most homes. Furniture is a luxury and a rarity. In the homes there are found usually a chest, a chair or a couch and a table. Shelves to hold dishes are seen in most every home. Occasionally, a dresser or cabinet can be found. The floor in an average Hunzan home is an earthen one with a large
354 square hole in the center for the fire. Then, of course, there is a large square hole in the roof to allow the smoke to leave and to allow light to enter, for there are no glass windows. This is fully open in the summer but during the colder winter days the hole is kept
4 partly or almost closed. This is the chief contributor to the eye troubles which affect many people in Hunza, as mentioned elsewhere in this book.

439 At one time little or no money ever entered Hunza
437 and the meager trade that they did do with passing caravans was by means of barter. The caravans coming through from China would bring cooking utensils, cloth, silk, tea and other commodities. For these, the people of Hunza would trade some of their crops or would work as coolies, porters or bearers.

occ During the past few years a bit of money has come

7:Tobe C,T-3 (1959)1960 AV7 Burusho AV7
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are, remember, no transportation facilities whatsoever, There 164 except the Mir's jeep which the citizens of Hunza don't [493] get a chance to use. There is no other wheeled vehicle in the entire country. Practically every step is a climb or a descent. So no one could really accuse me of exaggeration if I were bold enough to say that they're probably the most active and energetic people in creation. It could hardly be otherwise.

To illustrate another proof of their hardiness, all 147 along the trail we met people from Hunza walking barefoot—from young children to boys and young men and old men. While some wore shoes, most of them were [291] barefoot. They walked over sand, over gravel, over stones, over plain dirt roads without any misgivings.

I watched them with awe as they ran, walked and skipped over these exceedingly rough spots and I was convinced they must have exceptionally strong, sound. healthy feet and legs.

On a few occasions I watched the Hunzans digging [412] with a shovel. 'Tis done the ordinary natural way there —barefooted. That certainly proves, at least to me, that their feet are in wonderful condition. Most people in America can't dig worth a darn wearing heavy boots!

It is unqualifiedly a fact, in my humble opinion, that 164 the people of Hunza owe their splendid vital good health in part to these sound principles—their way of life, their food production and the way they prepare the fields for their crops—all accomplished in a natural normal way. Civilization may have many advantages—great discoveries have been made, machinery has been invented that does the work of many, many hands. In this modern machine age, a man need only work a couple of hours a day to supply himself with all the food, clothing and shelter that he can possibly use, but

584 Marriages are not arranged against
586 the will of either party, and although
divorce is legally very easy for men
593 or women, it is not common. Women
are neither abused nor overworked,
and the mother is the respected chief
of the house, as the father is of the
[581] farm. Marriage does not encompass
[562] companionship as we know it: men
spend their spare time in the company
of other men, and women visit exclu-
562 sively with other women. They hold
535 their dances on separate threshing
floors a half-mile or so apart, on the
same night, and woe betide the eager
teen-age boy who dresses in his sister's
clothes and sneaks into a girls' dance.

262 At the time of the Tumushuling,
[296] and only then, Hunza families
[231] butcher a sheep or two: cold weather
[251] preserves the meat for the few days
before it is all eaten—and it is virtually
all eaten. Even the long bones are
cracked to extract the last marrow.
After this taste of meat, the winter of
the dietary year sets in. Gradually the
supply of carrots and potatoes fails,
then the wheat, the barley, the dried
[146] apricots, and the tea. By springtime
the poorer folk may eat only once in
two days. No one starves to death, but
no one has enough to stop hunger.

146 The regular Hunza diet has no fats,
no animal proteins, no vitamin A, no
vitamin D, a deficiency of vitamin B,
and a serious deficiency of calcium.
Apricots contain some sugar and vita-
min C, but the poorer families are un-
245 able to raise large crops. (The size
556 of apricot orchards determines a
man's wealth and status.) Hunzas use
372 every bit of the apricot, as they do of
824 the sheep. They cut the pits from the
fruits, crack them, and remove the al-
● [412] mond-like nuts. The women hand-
grind these with stone mortars, then
squeeze the meal between a hand-stone
[359] and a flat rock to express the oil. Apri-
cot oil is fuel for the saucer-shaped
lamps that illuminate their homes, as
lamps of this type have done since the
824 Bronze Age. The oil is very bitter, na-
278 turally enough, because of its high
content of prussic acid, fifty drops of
which are said to be lethal in about
[273] four hours. Men add a few drops, as
[262] bitters, to their wine, and occasion-
ally a despondent woman takes a dose
in order to commit suicide.

164 Mild cases of rickets and scurvy
146 are rampant every spring—not enough
to kill, just enough to loosen teeth,
cause aching knees, and deform ribs

4a Durand G-3 (1888-93) 1900 AVI Kashmir
Burushe AVI

312 four and a half feet wide by one foot deep, which means a considerable flow of water. On this channel the cultivation of Hunza proper entirely depends; should it fail, starvation stares the people in the face. It is not surprising, therefore, that the greatest care should be expended on its preservation. But what is wonderful is the excellence of the result arrived at. It must be remembered that the people have no proper tools, no crowbars and dynamite to assist them. A tiny pick of soft iron, which looks like a child's garden tool, shovels fashioned out of wood, and a few poles as levers, are all that they have to work with. The use of mortar is unknown; all their walls are of dry masonry. Yet with all these disadvantages, with nothing but their eye as a guide to levels, they have carried this great irrigation channel for six miles, and turned an arid desert into a garden. For the most part it is true it runs along the side of a gently sloping mountain, but it also crosses many deep and perpendicular-sided ravines, and encounters masses of rock which have to be circumvented. It is a splendid work, and I admired it more every time I walked along it.

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159 The Thum was too unwell with fever to return my visit, and his Wazir came in his stead. Robertson went up to see the Chief, and prescribed for him, with the result that the descendant of Alexander, as he considered and called himself, got into a state of abject terror, thought his last hour was come, and refused to take the second dose which was the natural sequence of the first. Robertson reported that he was a coward, that he had literally